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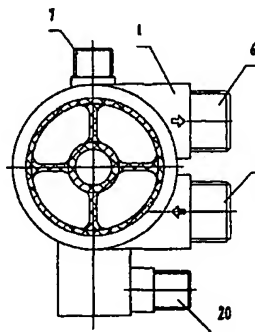
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(21) 国际申请号: PCT/CN2005/000343 (72) 发明人: 杨润德(YANG, Runde) [CN/CN]; 中国浙江省温州市南郊龙方工业区 1# 地块, Zhejiang 325029 (CN)。  
(22) 国际申请日: 2005 年 3 月 18 日 (18.03.2005) (72) 发明人; 及  
(25) 申请语言: 中文 (75) 发明人/申请人 (仅对美国): 伍孝荣(WU, Xiaorong) [CN/CN]; 中国浙江省温州市南郊龙方工业区 1# 地块, Zhejiang 325029 (CN)。 丁锋阳(DING, Fengyang) [CN/CN]; 中国浙江省温州市南郊龙方工业区 1# 地块, Zhejiang 325029 (CN)。  
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(74) 代理人: 上海新天专利代理有限公司(SHANGHAI XIN TIAN PATENT AGENT CO., LTD.); 中国上海市南昌路 59 号科学会堂思南楼 1606 室, Shanghai 200020 (CN)。

[见续页]

(54) Title: A MULTIFUNCTION CONTROL VALVE FOR A WATER TREATMENT SYSTEM

(54) 发明名称: 水处理系统用多功能控制阀



(57) Abstract: A multifunction control valve for a water treatment system includes a valve body provided with a water inlet, a water outlet, and a wastewater outlet. A valve core connected to a valve rod is located in the valve body. The valve body also has fluid passages communicated with the interior and exterior of the filtering core for the water treatment system, respectively, wherein the valve core uses a pair of active valve-plate and static valve-plate of which the endfaces movably and hermetically fit each other. The active valve-plate is connected to the valve rod, and a number of corresponding through holes is located in the static valve-plate. By connecting with corresponding interfaces, the active valve-plate is provided with one through hole and two dead holes. The through hole and dead holes in the active valve-plate are communicated with the corresponding through holes in the static valve-plate by rotating the active valve-plate, thereby forming various fluid passages to achieve the fluid control. The respective hole fits of the active valve-plate and the static valve-plate are distributed on the radius of the same turning circle. When used, by the relative lap position switching fit of respective holes in the active valve-plate and the static valve-plate, various control states may be achieved, such as softening, cleaning, or back washing, etc. The invention is simple in operation and compact in structure. The invention may be used in various industrial or domestic water treatment systems so as to improve the water treatment quality.

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#### (57) 摘要:

一种水处理系统用多功能控制阀, 包括设有进水口、出水口和污水出口的阀体, 和阀杆连接的阀芯置于阀体中, 阀体中还设有流道和水处理系统滤芯的内部及外部分别连通, 其特征为: 阀芯采用一对端面转动密封配合的动阀片和定阀片, 动阀片连接在阀杆上, 在定阀片上开设若干对应的通孔, 通过与相对应的接口相连, 在动阀片上开设一个通孔与二个盲孔, 通过旋转动阀片, 使动阀片上的通孔、盲孔与定阀片上的相对应的孔相通而形成多种不同的流体通道来实现对流体控制, 所述的定阀片和动阀片的各孔配合分布在同一回转圆半径上。使用时通过动、定阀片上的各不同孔的相对重叠位置切换配合, 即可实现软化或净化、反冲洗等不同控制状态, 操作清楚方便, 结构紧凑, 各种工业或家用水处理系统均能使用, 提高水处理质量。